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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/509,891 | 10/01/2004 | Frank Dietsche | 4372-4 | 2859 |
| 23117 7590 08/21/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203 | | | | |
| EXAMINER | | | | |
| CAMERON, ERMA C | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 1792 | | | | |
| MAIL DATE | | DELIVERY MODE | | |
| 08/21/2008 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/509,891

Applicant(s)

DIETSCHE ET AL.

Examiner

/Erma Cameron/

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 41, 44, 51 and 53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a) Claim 41, last three lines under ab1): the repetition makes the meaning unclear.
- b) Claims 44 and 51: it is not clear if the second coating is done with film Y or not.
- c) Claim 53: hydroxylamine is not a tertiary amine. A tertiary amine is one in which all substituents on the N are organic.

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3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 38, 41 and 52 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for R4 and R5 groups which may be C6-C12 aryl which is optionally substituted by alkyl substituents or aryl substituents, does not reasonably provide enablement for C6-C12 aryl which is required to be substituted. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

See, for instance, page 7, lines 24-29 which defines optionally substituted C6-C12 aryl as one type of R4 or R5 group.

Claim Objections

5. Claims 40 and 47 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The subject matter of these claims does not further limit the claims on which they are dependent.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denzinger et al (5175361).

'361 teaches a composition that can be used as a scale inhibitor in a water system (1:61) that comprises water, 40-90 wt% of acrylic acid, 10-60 wt% of maleic anhydride and 0-20 wt% of VPA, alkali metal salts of sulfonic acids, as well as amine or ammonium salts, and other additives such as free radical initiators (2:3-2:55, see example 1). The amines of '361 would be inclusive of the amines of claim 53.

The composition overlaps that claimed by applicant.

8. Claims 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirk et al (5601723).

'723 teaches a composition to be used in water circulating systems that comprises water, 3-50 wt % of maleic anhydride (5:43), 50-97 wt% of acrylic acid (5:61), 0-40 wt % of VPA

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(6:14), allylsulfonic acid (6:3-22), as well as amino containing compounds (6:3-22) such as N-vinylimidazole, and other additives such as water soluble metal salts or corrosion inhibitors (6:23-40) (2:34-62; 8:50-55; 10:58-11:5).

The composition overlaps that claimed by applicant.

9. Claims 37-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/55391.

'391 teaches treating a metal surface with an aqueous composition of acrylic acid, maleic acid, vinylphosphonic acid and vinylsulfonic acid, applied by spraying or other means, and followed by further coatings (see Abstract; pp 3-5). The quantities of these components is not given, but it would have been obvious to one of ordinary skill in the art to have optimized the composition thru no more than routine experimentation.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Erma Cameron/ whose telephone number is 571-272-1416. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Erma Cameron/
Primary Examiner
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August 15, 2008